



US 20190046720A1

(19) **United States**(12) **Patent Application Publication**
Kamen et al.(10) **Pub. No.: US 2019/0046720 A1**(43) **Pub. Date: Feb. 14, 2019**(54) **PUMP ASSEMBLY WITH SWITCH**(71) Applicant: **DEKA Products Limited Partnership,**
Manchester, NH (US)(72) Inventors: **Dean Kamen,** Bedford, NH (US);
Larry Brian Gray, Merrimack, NH
(US); **Gerald Michael Guay,**
Greenville, NH (US)(21) Appl. No.: **15/894,304**(22) Filed: **Feb. 12, 2018****Related U.S. Application Data**(63) Continuation of application No. 13/858,569, filed on
Apr. 8, 2013, now Pat. No. 9,931,461, which is a
continuation of application No. 12/347,984, filed on
Dec. 31, 2008, now Pat. No. 8,414,563.(60) Provisional application No. 61/018,054, filed on Dec.
31, 2007, provisional application No. 61/018,042,
filed on Dec. 31, 2007, provisional application No.
61/017,989, filed on Dec. 31, 2007, provisional ap-
plication No. 61/018,002, filed on Dec. 31, 2007,
provisional application No. 61/018,339, filed on Dec.
31, 2007, provisional application No. 61/023,645,
filed on Jan. 25, 2008, provisional application No.
61/101,053, filed on Sep. 29, 2008, provisional ap-plication No. 61/101,077, filed on Sep. 29, 2008,
provisional application No. 61/101,105, filed on Sep.
29, 2008.**Publication Classification**(51) **Int. Cl.***A61M 5/142* (2006.01)*A61M 5/168* (2006.01)*A61M 5/172* (2006.01)*A61M 5/14* (2006.01)(52) **U.S. Cl.**CPC *A61M 5/14248* (2013.01); *A61M 5/14244*
(2013.01); *A61M 5/16809* (2013.01); *A61M*
5/16886 (2013.01); *A61M 5/172* (2013.01);
A61M 5/1413 (2013.01); *A61M 2205/0266*
(2013.01); *A61M 2205/3375* (2013.01); *A61M*
2205/3569 (2013.01); *A61M 2205/6018*
(2013.01); *A61M 2205/8237* (2013.01); *A61M*
2209/086 (2013.01); *A61M 2005/14268*
(2013.01)

(57)

ABSTRACTA wearable infusion pump assembly includes a reusable
housing assembly, and a disposable housing assembly
including a reservoir for receiving an infusible fluid. The
wearable infusion pump assembly also includes a releasable
engagement assembly configured to allow the reusable hous-
ing assembly to releasably engage the disposable housing
assembly. A switch assembly of the wearable infusion pump
assembly is configured to effectuate a functionality of the
infusion pump assembly.